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FORT BRAGG AND THE RED-COCKADED WOODPECKER:
A CONTENT ANALYSIS OF SELECTED LOCAL NEWSPAPERS'
COVERAGE OF FORT BRAGG'S ENDANGERED SPECIES
PROTECTION EFFORTS

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A Thesis

Presented to the Faculty of the

W. Page Pitt School of Journalism and Mass Communications

Marshall University

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In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Journalism

by

Mark H. Wiggins

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Chapter I

THE PROBLEM

Statement of Problem

The Army commanders and public affairs officers have been involved in controversial efforts to comply with environmental regulations that protect an endangered woodpecker species and its habitat at Fort Bragg. How have the local print media perceived Fort Bragg's efforts in this situation? Can inferences be made about public affairs efforts and media perception?

Background

The U.S. Army's Environmental Stewardship Strategy, as written in 1992, states the Army realizes it is not outside of the fundamental values of American society and strives to set an example of good responsible citizenship. Protecting the environment is a facet of good responsible citizenship. While training units for combat remains the primary focus of the Army, taking care of its training lands is imperative, too. Minimizing the effects training for war has on natural resources is an immense task and must be taken seriously to succeed (Environmental Strategy 4-6).

One of the four pillars of the Army's environmental program, as outlined in the environmental stewardship strategy, is conservation, which not only includes limited use of lands where endangered species habitats exist, but protecting all training land as well (8). Programs at Fort Bragg, North Carolina, illustrate the Army's efforts to comply with environmental regulations.

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military activity on endangered species on Fort Bragg. FWS stated the RCW population on Fort Bragg was critical to the survival of the species, especially given the destruction of a larger population of the birds during the September 1989 Hurricane Hugo in South Carolina. The FWS Biological Opinion further outlined procedures to reduce the effects of Fort Bragg's activities on the woodpecker. The FWS' official biological opinion concluded with the requirement for Fort Bragg to reinitiate formal consultation with FWS if ever there were indications the species was being affected or would possibly be affected by military actions (Biological 4-7).

On October 30, 1991, after careful study, the Endangered Species Branch of Fort Bragg's Directorate of Engineering and Housing determined the RCW was, in fact, being affected. On that date, Fort Bragg voluntarily closed down a \$20 million weapons firing range and requested a second consultation with FWS.

When the range was initially being designed, studies were conducted to determine the impacts of live munitions on the RCW and its habitat. Fort Bragg officials and biologists had worked with FWS to determine the environmental impacts of the range. The range was subsequently approved and construction was completed in 1987. All seemed well until the October 1991 decision (Biological 58).

The range was reopened August 10, 1992, after the plight of the woodpeckers on the range was studied more closely, but the need to continue conservation of the endangered species and its habitat still exists. Fort Bragg also has had to place other limitations on the use

of its training lands to comply with the environmental regulations surrounding the woodpecker (Biological 59).

The Army commanders and public affairs officers have been involved in efforts to comply with environmental regulations that protect the land and this woodpecker species at Fort Bragg. The situation at Fort Bragg has presented a conflict between the military's use of available training land and the harm that may result to the endangered woodpecker species from using that same land. The situation also has caused conflict between the military at Fort Bragg and the environmentalists who want to protect the species by stopping or curbing the military's use of the land.

In 1992, the Rand Corporation, a non-profit institution that conducts analytic research on a wide range of public policies, published a study entitled "Two Shades of Green: Environmental Protection and Combat Training." The study investigated the implications of environmental restrictions for military combat training using Fort Bragg and its involvement with the Red-Cockaded Woodpecker as a case study to generalize the implications to other military installations (v).

The Rand study summarized Fort Bragg's response to the RCW/combat training dilemma in five stages: avoidance--treat the issue as a distractor; isolate-- delegate the issue to an already overwhelmed environmental office; react-- cooperate with agencies with limited analysis; suffer-- live with restrictions and talk about exemptions; and finally, plan and negotiate. Rand points out the

dilemma would not have been as great had Fort Bragg initially responded with the fifth stage-- planning and negotiation.

The Rand study also purported to have implications for the entire Army in response to environmental-planning laws (55-68).

Significance of the Study

In the Rand study, the authors pointed out that for the Army to succeed in its environmental efforts, it must bring all of its assets to the negotiating table, not merely those of environmental offices. In other words, all of a military installation's commanders and staff offices must be involved. Public affairs is a part of the installation's staff that must be involved (69-76).

In a telephone interview on April 2, 1993, David Rubenson, one of the authors of the Rand study, agreed that a study of media content would be an appropriate extension of the Rand study .

In a telephone interview January 25, 1993, the chief of Fort Bragg media relations, Major Scott Peterman, also expressed interest in the research. The media relations office has compiled a clip book on the subject, but no one has conducted a content analysis to obtain feedback on their media relations efforts. Results of this study may provide the public affairs office some valuable feedback they have not yet received.

Results of this study could also provide information for other military installations faced with conservation problems and direction in how to deal with them from a public affairs perspective.

Research Questions

This study intended to conduct a content analysis of newspaper articles to determine the perception of Fort Bragg's efforts to comply with the Endangered Species Act requirements for the Red-cockaded Woodpecker and its habitat. The entire population of articles from January 1, 1988 to April 30, 1993 was coded. Once the data were derived from the content analysis, the researcher attempted to infer relationships between public affairs efforts and media perception.

The following quantitative research questions were posed:

- 1) In selected local newspapers, what was the relative amount of coverage of certain aspects or elements of the issue involving Fort Bragg and the endangered bird species, the Red-Cockaded Woodpecker?
- 2) Was there a discernible tone to the coverage? What percentage of individual references in articles and headlines were positive, negative, or neutral in the way in which they reflected upon certain aspects or elements of Fort Bragg's actions relative to the protection of the endangered woodpecker species?
- 3) How did the amount and tone of coverage differ between Fort Bragg's command information newspaper, the Paraglide, and the civilian newspapers? Was the Paraglide significantly more positive than the others?
- 4) What actions has the Fort Bragg public affairs office taken? Can inferences be made about public affairs actions and local newspaper coverage?

Assumptions and Limitations

The major assumption of this study was that inferences about public affairs efforts could be made from determining media perception by analyzing newspaper content.

Another assumption was that the newspaper coverage would have a discernible tone and would not be completely objective, as journalistic writing purports to be.

Limitations were numerous. First, only newspapers were analyzed. Television and radio may have covered the issue to some extent, but time and resource restrictions led to only analyzing newspapers. Also, other public affairs functions like public meetings, telephone inquiries, and visits by media and environmental officials were not studied.

Newspapers were not without limitations either. For example, no sampling technique was used in this study. The entire population of news articles and editorials in the selected newspapers was analyzed. Using an entire population may have not been feasible with another topic, but the issue involving the Red-Cockaded Woodpecker and Fort Bragg had not been covered extensively, so it was possible to look at total coverage.

Local newspaper coverage of Fort Bragg's involvement with the Red-Cockaded Woodpecker issue was interrupted by news coverage of other events: the invasion of Panama in December 1990, military relief efforts after Hurricane Hugo in 1990, Desert Shield/Storm from August 1990 to February 1991, refugee relief efforts in Guantanamo Bay, Cuba, in 1991, military relief efforts after

Hurricane Andrew in 1992, and the military relief effort "Operation Rescue" in Somalia. Soldiers from Fort Bragg were involved in each of these events and newspaper attention naturally gravitated to these larger national issues and their effects on local citizens.

When soldiers deployed in support of these missions, training activities also decreased at Fort Bragg, which, in turn, lessened the impact of the military's presence on the woodpecker habitat. This also may serve as an explanation for the small population of news articles and editorials on the issue.

Despite the small amount of coverage given the issue, it has been important to the Army and Fort Bragg to find viable solutions to the effects of military training on the woodpecker's habitat and the restrictions to training that protection of the endangered species requires.

Another limitation was the possible errors involved in trying to obtain the entire population of articles and editorials. Simple oversight of a relevant article or editorial during a manual search of microfilm and bound copies of newspapers was possible.

Also, the study did not consider photos or graphics. Preliminary examination of a sample of articles and editorials revealed little use of photos and graphics. When a photo accompanied an article, it was very likely to be a photo of the woodpecker. In addition, graphics and photos were not available for articles obtained through the newspapers' databases. Those databases in the newspapers' libraries did not provide photos or graphics.

Chapter II

LITERATURE REVIEW

Increased Environmental Awareness

Observation of current political campaigns reveals a large public concern for environmental issues. Spurred by recent incidents such as the Exxon Valdez oil tanker accident, the public has had a resurgence in environmental awareness. This newly generated concern has spilled over into the military arena where the closing of military bases has revealed that costly major environmental cleanup is necessary. A 1993 Association of the United States Army analysis of the Army budget reveals a fiscal year 1992 *environmental budget of \$1.15 billion* and a fiscal year 1993 *environmental budget of \$1.12 billion*. Both figures constitute major items in their respective year's budgets (50).

Recent studies and polls indicate the public's concern for environmental quality has reached an all-time high. Dunlap and Scarce revealed that public awareness of environmental problems and support for environmental protection is higher now than in the early seventies. Part of the heightened public awareness includes a rise in support for government action, a belief that business and industry will not voluntarily protect the environment, and a willingness to pay for environmental cleanup and protection (17).

Communications Techniques

C.J. Silas, the chairman and CEO of Phillips Petroleum Company, outlined three steps for businesses to win the trust of such an environmentally sensitive public in a January 1990 Public Relations Journal article.

First, he stated that one must study and understand the implications of the public's increased environmental sensitivity; second, one must take the environmental initiative; and third, one should learn to communicate better. The three steps can be implemented with public relations counselors and public-minded CEOs, but only with action and involvement (Silas 1).

A 1990 Public Relations Journal article cites a Louis Harris poll result that many Americans rated a clean environment more important than a satisfactory sex life and companies that conducted business without regard to the environment would see the public demand for their products or services dwindle. The article further states that public relations professionals should take advantage of their strategic positions to influence how organizations communicate environmental concerns. Demonstrating simple adherence to federal regulations is not good enough (Mother Earth 31).

Harrison developed the "envirocomm Quality" model of environmental communications to push organizations over the level of simple compliance and crisis management in environmental issues. The model focuses on dialogue, or two-way communication,

with critical publics that can position an organization as part of the environmental solution, not the problem (225-227).

The Army's Public Affairs Campaign Plan for Environmental Stewardship, drafted in October 1992, outlines messages for communicating the Army's environmental strategy to become "part of the solution." Some of the messages deal with simple compliance issues, but others also are constructed to deal with environmental restoration, prevention, and conservation issues. The attempt is to go beyond reporting minimum compliance with regulations and strive to demonstrate the Army's willingness to be a national leader in environmental and natural resource stewardship. The public affairs campaign plan also outlines responsibilities to subordinate offices for relations with environmental publics, the media, and other concerned groups. The intent is to use all available public affairs tools to communicate the Army's sincerity in environmental issues (45).

In addition to the Army's environmental stewardship plan, the Army Corps of Engineers has prepared two guides to assist Army commanders with environmental issues. One is a guide for environmental compliance and the other is for environmental management. In both guides, the public relations aspect is addressed, but begins with a redefining of the term.

According to the guides, "public relations" becomes "public involvement." The difference lies in the effort to "involve" the public in the decision-making process as opposed to "influencing" public opinion. Mutual two-way communication is stressed in the

"public involvement" initiative with the same emphasis as the textbook "public relations" definition (Guide to Env. Compliance 24; Guide to Env. Management 31).

The environmental management guide published by the Corps of Engineers also offers an interesting list of questions for Army public affairs offices.

How is our environmental program perceived in the community?

What is our relationship with the media on environmental issues?

Do we have any good news stories from the environmental office that can be released to the local newspaper?

What actions is the PAO taking to increase the environmental awareness of our workforce? (28)

These are but a few of the questions the Corps of Engineers suggests for commanders. All are very pertinent to the intent of this study.

Media Relations

A sound working relationship with the civilian media is very important to Army public affairs offices in communicating their environmental messages. Regardless of the definition of a "sound" relationship, PAOs must be aware that journalists' perceptions of public relations personnel are somewhat negative.

Belz, Talbott, and Starck revealed that journalists perceived that public relations involved advocacy, persuasion, withholding of information, and aggressiveness. In that study, journalists also indicated that public relations is not concerned with objectivity,

balance, or fairness, and that public relations does little to protect the public interest (132).

These are difficult perceptions for public relations/affairs personnel to overcome if the "sound" working relationship is not developed. Belz, Talbott, and Starck cited an earlier study in which journalists tended to view public relations practitioners as equals if they knew and worked with them on a continuous basis (126).

Army public affairs offices also must be aware of newspaper treatment of environmental stories. Corbett's content analysis of rural and urban newspaper coverage of wildlife issues revealed that newspapers, both rural and urban, rely heavily on bureaucratic authorities as sources. Public affairs offices that realize this can better assess their own situations and tailor their media releases and other public affairs products.

Corbett asserts

a person obtaining most of her or his wildlife information from newspapers is receiving an extremely one-sided viewpoint that strongly reinforces the current wildlife management system. A rural resident could increase the overall volume of wildlife information by reading both a rural and urban newspaper, but the same bureaucratic sources would continue to dominate. The "outdoor" pages also would continue to dominate wildlife information in both rural and urban newspapers (937).

Theory

While the purpose of this study was not to prove or disprove a particular communication paradigm or theory, it was pertinent to relate the applicable communication theory to the situation.

The situation at Fort Bragg has presented a conflict between the military's use of available training land and the harm that using that same land may cause the Red-Cockaded Woodpecker. The media have been a supposed neutral agency in covering these conflicts. The Social Conflict paradigm applies here.

The assumptions of the social conflict model are:

1) Society consists of categories and groups of people whose interests differ sharply from one another.

2) These components of society attempt to pursue their own interests in competition with others or to preserve their interests by resisting the competitive efforts of others.

3) A society so organized constantly experiences conflict as its components try to attain new gains or to preserve their interests; conflict, in other words, is ubiquitous.

4) Out of the dialectic process of competing and conflicting interests comes an ongoing process of change; societies are not in a state of equilibrium but are ever-changing. (Ball-Rokeach and DeFleur 36)

Fort Bragg has been in conflict with the federal agencies and environmental groups concerned with the existence of the Red-Cockaded Woodpecker. The Army and these environmentally concerned agencies have tried to maintain their positions, but have accepted compromise, therefore creating change. The media also have been involved in the process.

Three of Lasswell and Wright's four functions of the mass media apply to the media's role in the Fort Bragg situation-- surveillance, correlation, and transmission of culture. The fourth function,

entertainment, does not seem to apply to news of an endangered species.

The media have served the surveillance function by providing news to the public about the endangered species at Fort Bragg. They have served the correlation function by selecting the stories to report, interpreting the situation between Fort Bragg and concerned publics, and criticizing any wrongdoing. The media also have served the transmission of culture function by teaching the public about the Red-Cockaded Woodpecker and its plight on the Fort Bragg installation (Severin and Tankard 217-220).

Issues Management

The media (specifically, the newspapers for the purposes of this study) can be a powerful force in affecting public opinion. It is necessary for public relations personnel to monitor and manage issues that arise in order to manage their organization's response and resolve conflicts advantageously. When an issue arises, mass media attention may amplify it into a public issue that may become part of the public policy process. Early detection and management of the issue would be a key factor in a successful outcome (Hainesworth 33-35).

Part of the procedure in issues management is monitoring media coverage. The Fort Bragg public affairs office has compiled a clip book during their involvement with the Red-Cockaded Woodpecker issue, but it has no formal content analysis of the articles to gauge media perception. This study attempts to provide just that.

Chapter III

DESIGN OF STUDY

Sources

Content analysis was conducted on all available articles in four local newspapers and the installation newspaper from January 1, 1988, to April 30, 1993. Only those articles with Fort Bragg's dilemma with the Red-Cockaded Woodpecker as the predominant theme were chosen.

The Fayetteville Observer-Times (daily), Spring Lake News (weekly), and the Raleigh News and Observer (daily) were selected because they are the only newspapers for which the Fort Bragg public affairs office routinely prepares media releases. The Sanford Herald (daily) was chosen because of its relative proximity to Fort Bragg and its potential to offer a sample of local newspaper articles not inspired by a prepared media release. The Paraglide, a weekly publication, is the Fort Bragg newspaper that falls under the command information section of the installation public affairs office and is an integral part of the public affairs effort at Fort Bragg. (See Appendix A.)

As stated above, the coverage of the Red-Cockaded Woodpecker issue was examined from January 1, 1988, to present, because the controversy surrounding the woodpecker and Fort Bragg began in 1988.

"By letter of May 12, 1988, [the United States Fish and Wildlife Service] contacted the Army expressing concerns of various activities at Fort Bragg on the Red-Cockaded Woodpecker and identified impacts requiring consultation. . . ." (Biological 2)

The search for the pertinent articles and editorials provided the first step necessary to answer the first research question- "What was the relative amount of coverage of certain aspects or elements of the issue involving Fort Bragg and the endangered bird species, the Red-Cockaded Woodpecker?"

Procedure

Paragraphs of copy were categorized into one of three content categories and one of three directional categories. Paragraphs were chosen as the unit of analysis because newspaper copy is written in short paragraphs usually devoted to a single theme. Headlines were treated as one unit and categorized similarly. If a paragraph or headline did not contain statements predominantly in one direction, they were placed in the neutral category. A paragraph with two or more statements in the same direction was assigned to a category broad enough to cover both statements (Budd, Donohew and Thorp 40). Paragraphs that fit no content category were discarded.

This procedure was designed to answer fully the first research question by determining the quantity of articles/editorials and the corresponding number of paragraphs and headlines that fit the prescribed content categories.

The placement of paragraphs and headlines into directional categories was designed to answer the second research question concerning "discernible tone."

Three coders were trained through familiarization with the subject and the categories and units. Pretests and training using articles not in the sample were conducted to ensure a full understanding of the categorization and proper use of the coding sheet, and to ensure intercoder reliability.

Each of the three coders read and analyzed all the articles and headlines. Two of the three coders had to agree on the categorization of any paragraph or headline. Disputes where no two coders agreed on categorization of a paragraph or headline were resolved by the researcher. Intercoder reliability checks were made after each series of coded articles to ensure accuracy ("Statistical Designs" 149).

According to Stempel, results of reliability may be reported in terms of percentage and what percent is acceptable is a matter of judgment ("Content Analysis" 133). The target intercoder reliability for this study was 80%. Reliability was established as the percentage in which two of three coders agreed on the categorization or "not rated" status of a paragraph or headline.

The content categories for the study were:

Army/Fort Bragg: References to Army and Fort Bragg military officials such as commanders or directors of military offices. Military rank and Department of Defense titles are indicators of these military officials. (Does not include military environmentalists/biologists.) Also included are references to the Army/Fort Bragg policies, plans, techniques, and programs of land management, military training and the use of military training facilities, and compliance with environmental law.

Red-Cockaded Woodpecker (RCW): References to those RCWs living within the confines of Fort Bragg, thereby creating the endangered species protection issue.

Fort Bragg environmental/wildlife offices and personnel: References to the personnel or the offices of the Fort Bragg Department of Engineering and Housing's Environmental and Natural Resources Division or the Endangered Species Branch within that division.

These specific content categories were chosen because each represents a "side" of the woodpecker dilemma. The Army/Fort Bragg category represents the official Army efforts and policies; the RCW category is the subject in question; and the Fort Bragg environmental/wildlife offices and personnel represent those who have strived to connect the Army's efforts and policies with the needs of the RCW. The intent of the study was to determine how each "side" was covered by the selected newspapers. A fourth "side," U.S. Fish and Wildlife Service/other concerned civilian conservation agencies, has also been involved in the dilemma, but is not a concern for Army public affairs.

The directional categories into which the paragraphs of copy and headlines were placed were "negative, neutral, and positive." See Appendix C for the coding sheet.

The articles were numbered and the paragraphs were numbered within the articles. The coders entered the story number at the top of the coding sheet and wrote the paragraph number in the proper content and directional category. Those paragraphs that were not deemed fitting of any content category of the study were placed in a "not rated" status in the "Remarks" section of the coding sheet. If

two of three coders categorized a paragraph as "not rated," then that paragraph was thrown out of the population, as stated earlier.

Coders were given one week to code a series of 20 randomly-selected articles. This process was repeated three times. There was no collaboration or contact between the coders during the coding process. Informal meetings were held after each coding series to refine or reemphasize coder responsibilities and instructions. See Appendix D for coder instructions.

Treatment of Data

Once all articles and headlines were coded, the results were entered into computer statistical analysis software as variables.

Only paragraphs and headlines that were placed into a content and directional category were considered in the statistical analysis. Units deemed as "not rated" by two of three coders were not used in the statistical analysis, but were used in the calculation of intercoder reliability. The coders had to agree to "not rate" a unit just as they had to agree on the categorization of the units they did choose to rate.

The chi-square test was performed to determine any significant difference in category results, overall article and headline classification, and differences among the newspapers.

The results were reported in terms of percentages and frequencies to answer the second and third research questions.

Also, Fort Bragg internal media releases, memoranda, issues papers, and information papers were used as a context for relating the data to actual events and attempt to answer the fourth research

question of "inferring relationships between Fort Bragg public affairs actions and media perception."

Assumptions and Limitations

During the conduct of the study, several new limitations were discovered. The most important limitation of the study was the original category construction.

As reported above, the final number of categories into which paragraphs and headlines were placed was three. The original number was six, but after the first attempt at coding, which yielded approximately 40 percent intercoder reliability, the six categories were collapsed into three.

Originally, the coders had six categories with three directions each, along with a decision to "not rate" the paragraph at all. This meant the coders had to decide between 19 different locations to place a paragraph. Nineteen choices proved to be too many for paragraph categorization; however the categorization of headlines did not prove as difficult (85 percent intercoder reliability in the pre-test).

The limitation was that paragraphs extended beyond simple one-sentence, one-theme statements that headlines often exhibited. The coders had to make decisions that could not be anticipated in the coder instructions or training. Collapsing the categories to three required the coders to chose between only 10 locations to place a paragraph or headline and greatly enhanced intercoder reliability percentage.

Another limitation discovered during the study was the difficulty the coders had in categorizing a headline or paragraph without "reading" meaning into it, while understanding obvious implied meanings at the same time. This was especially true when a headline or paragraph was slightly sarcastic or humorous.

A good example is the headline that read, "Tiny Rat-A-Tat Outsounds Armor." One coder placed this headline into the Army/Fort Bragg category under a negative direction, while the other coders placed it in the RCW category under the negative direction. Although two of three coders agreed on the category and direction, this headline could have been more appropriately placed in the Army-negative category. The headline sarcastically implies that a "tiny" woodpecker can "outsound" the Army's machines, or in other words, can silence them. The direct reference stated in the headline is the woodpecker, but arguably, the implied reference is negative toward the Army.

In cases such as the one described above, the coders were instructed to take the obvious meaning and avoid strict mechanical subject-verb-direct object interpretations.

Another adjustment to the coding instructions was the treatment of paragraphs that included attribution. Coders initially tended to categorize a paragraph based on the speaker or the object of the attribution rather than what was being said or attributed. For example, if a military commander was quoted as being angry about a biologist recommending a firing range be closed, then the paragraph should be categorized on the quote, not the commander himself. The

coders were instructed to ask themselves, "What is being referred to?"- Not "Who is doing the talking?"

Lastly, coders had to continually be reminded to avoid over-scrutinization of the copy. Coders were reminded the intent of the study was to determine media perception through the eyes of the average newspaper reader who has no elaborate system of categorization devised to reach decisions about who or what is being referred to negatively, neutrally, or positively.

This reminder also harbored the assumption that through understanding of the subject matter, the content categories, and the procedure, choosing the "direction category" would become clearer. Because of this assumption, no elaborate system of determining direction was devised. The coders were left to their own senses to judge what constituted a negative, neutral, or positive reference.

Chapter IV

RESULTS

Articles and Editorials

The search for pertinent articles and editorials in the five newspapers yielded 15 stories (241 paragraphs, 15 headlines) from the Fort Bragg Paraglide, 37 stories (666 paragraphs, 36 headlines) from the Fayetteville Observer-Times, 9 stories (118 paragraphs, 9 headlines) from the Raleigh News & Observer, and 2 stories (37 paragraphs, 2 headlines) from the Sanford Herald. The Spring Lake News contained no stories pertinent to the study. (See Appendix B for the listing of stories by newspaper, date, and page.) The total yield from the search was 63 stories with 62 headlines, containing 1,062 paragraphs.

Reliability

Once the coding process began, intercoder reliability was checked after each series of stories coded. The first 20 articles coded yielded 85.92 percent agreement for paragraphs and 95 percent for headlines. The second series, consisting of 23 articles, yielded 87.75 percent agreement for paragraphs and 86.36 percent for headlines. The third and final series, consisting of 20 stories, yielded 89.55 percent agreement for paragraphs and 100 percent for headlines. The overall agreement for paragraphs was 87.76 percent and for headlines, 93.55 percent. Again, intercoder reliability was established as the percentage in which at least two of three coders agreed on the categorization or "not rated" status of a paragraph or headline.

Categorization

The coding process of the 1,062 total paragraphs resulted in 919 categorized paragraphs, 143 paragraphs "not rated," and 130 paragraphs for the researcher to resolve. After resolution of the disputed paragraphs, the final results were 894 categorized paragraphs and 168 "not rated" paragraphs.

The coding of the 62 total headlines yielded 58 categorized headlines and four for the researcher to resolve. After resolution of the disputed headlines, the results were 62 categorized headlines. None were "not rated."

The 894 paragraphs for statistical analysis were categorized as follows: Content Category I (Army/Ft. Bragg)- 591 total paragraphs (66.11 percent); Content Category II (RCW)- 230 total paragraphs (25.73 percent); and Content Category III (Military Environmental/Wildlife)- 73 total paragraphs (8.17 percent). Total negative paragraphs was 159 (17.79 percent), total neutral was 480 (53.69 percent), and total positive was 255 (28.5 percent).

Paragraphs

The 591 paragraphs in Category I included 115 negative (19.46 percent), 263 neutral (44.50 percent), and 213 positive (36.04 percent). The 230 paragraphs in Category II included 44 negative (19.13 percent), 177 neutral (76.96 percent), and 9 positive (3.91 percent). The 73 paragraphs in Category III included zero negative, 40 neutral (54.79 percent), and 33 positive (45.21 percent).

A three-by-three chi square test was conducted comparing content category by directional category for paragraphs. The results were significant at $p < .0001$ with a chi square value of 114.317. (See Table 1.)

Table 1
 Paragraphs-
 Comparison of Content Category by Directional Category

| | Content Category | Directional Category | | | Total |
|-----------|--|--------------------------------|--------------------------------|--------------------------------|---------------|
| | | Negative | Neutral | Positive | |
| Frequency | | | | | |
| Total % | | | | | |
| Row % | | | | | |
| Column % | | | | | |
| | Cat I-Army/ Ft. Bragg | 115 12.86 19.46 72.33 | 263 29.42 44.50 54.79 | 213 23.83 36.04 83.53 | 591 66.11 |
| | Cat II-RCW | 44 4.92 19.13 27.67 | 177 19.80 76.96 36.88 | 9 1.01 3.91 3.53 | 230 25.73 |
| | Cat III-Military Environmental/ Wildlife | 0 0.00 0.00 0.00 | 40 4.47 54.79 8.33 | 33 3.69 45.21 12.94 | 73 8.17 |
| | Total | 159 17.79 | 480 53.69 | 255 28.52 | 894 100.00 |

Degrees of Freedom 4
 Chi Square Value 114.317
 Probability $p < .0001$

After the initial comparison of paragraphs by content categories and directional categories, the four newspapers were compared by direction within the three content categories to determine how each newspaper directionally treated each subject.

There were 591 paragraphs placed in Content Category I as stated above. The Paraglide had 129 paragraphs (21.83 percent of the total) categorized in Content Category I, 356 paragraphs (60.24 percent) were the Observer-Times, 87 paragraphs (14.72 percent) were the News & Observer's, and 19 paragraphs (3.21 percent) were the Herald's.

The Paraglide's 129 Content Category I paragraphs were spread across the three directional categories with 4 negative (3.10 percent), 53 neutral (41.09 percent), and 72 positive (55.81 percent). The Observer-Times' 356 Category I paragraphs were 62 negative (17.42 percent), 174 neutral (48.88 percent), and 120 positive (33.71 percent). The News & Observer's 87 Content Category I paragraphs were 45 negative (51.72 percent), 27 neutral (31.03 percent), and 15 positive (17.24 percent). The Herald's 19 Category I paragraphs were 4 negative (21.05 percent), 9 neutral (47.37 percent), and 6 positive (31.58 percent).

A four-by-three chi square test comparing newspaper by directional category for paragraphs under Content Category I revealed significance at $p < .0001$ with a chi square value of 93.692. (See Table 2.)

Table 2

Paragraphs-
Comparison of Newspaper by Direction Under the
Army/Ft. Bragg Category

Category I- Army/Ft. Bragg

| Frequency | Newspaper | Negative | Neutral | Positive | Total |
|-----------|-----------------|----------|---------|----------|--------|
| Total % | Paraglide | 4 | 53 | 72 | 129 |
| Row % | | 0.68 | 8.97 | 12.18 | 21.83 |
| Column % | | 3.10 | 41.09 | 55.81 | |
| | Observer-Times | 62 | 174 | 120 | 356 |
| | | 10.49 | 29.44 | 20.30 | 60.24 |
| | | 17.42 | 48.88 | 33.71 | |
| | News & Observer | 45 | 27 | 15 | 87 |
| | | 7.61 | 4.57 | 2.54 | 14.72 |
| | | 51.72 | 31.03 | 17.24 | |
| | Herald | 4 | 9 | 6 | 19 |
| | | 0.68 | 1.52 | 1.02 | 3.21 |
| | | 21.05 | 47.37 | 31.58 | |
| | | 3.48 | 3.42 | 2.82 | |
| | Total | 115 | 263 | 213 | 591 |
| | | 19.46 | 44.50 | 36.04 | 100.00 |

Degrees of Freedom 6
Chi Square Value 93.692
Probability p < .0001

When the four newspapers were compared by directional category under Content Category II, the 230 paragraphs were distributed across the newspapers with the Paraglide having 55 paragraphs (23.91 percent of the total), 139 paragraphs (60.43 percent) were the Observer-Times', 21 paragraphs (9.13 percent) were the News & Observer's, and 15 paragraphs (6.52 percent) were the Herald's.

The Paraglide's 55 Content Category II paragraphs were spread across the three directional categories with 4 negative (7.27 percent), 48 neutral (87.27 percent), and 3 positive (5.45 percent). The Observer-Times' 139 Category II paragraphs were 31 negative (22.30 percent), 102 neutral (73.38 percent), and 6 positive (4.32 percent). The News & Observer's 21 Content Category II paragraphs were 4 negative (19.05 percent), 17 neutral (80.95 percent), and zero positive. The Herald's 15 Category II paragraphs were 5 negative (33.33 percent), 10 neutral (66.67 percent), and zero positive.

A four-by-three chi square test comparing newspaper by directional category for paragraphs under Content Category II showed no significance with a chi square value of 9.397. (See Table 3.)

When newspapers were compared by directional category under Content Category III, the 73 paragraphs were distributed across the newspapers with the Paraglide having 36 paragraphs (49.32 percent of the total Cat. III paragraphs), 35 paragraphs (47.95 percent) were the Observer-Times', 2 paragraphs (2.74 percent) were the News & Observer's, and the Herald had no paragraphs in Content Category III.

Table 3

Paragraphs-
Comparison of Newspaper by Direction Under the RCW Category

| | | Category II- RCW | | | |
|-----------|-----------------|------------------|------------|----------|------------|
| | Newspaper | Negative | Neutral | Positive | Total |
| Frequency | | 4 | 48 | 3 | 55 |
| Total % | Paraglide | 1.74 | 20.87 | 1.30 | 23.91 |
| Row % | | 7.27 | 87.27 | 5.45 | |
| Column % | | 9.09 | 27.12 | 33.33 | |
| | Observer-Times | 31 | 102 | 6 | 139 |
| | | 13.48 | 44.35 | 2.61 | 60.43 |
| | | 22.30 | 73.38 | 4.32 | |
| | | 70.45 | 57.63 | 66.67 | |
| | News & Observer | 4 | 17 | 0 | 21 |
| | | 1.74 | 7.39 | 0.00 | 9.13 |
| | | 19.05 | 80.95 | 0.00 | |
| | | 9.09 | 9.60 | 0.00 | |
| | Herald | 5 | 10 | 0 | 15 |
| | | 2.17 | 4.35 | 0.00 | 6.52 |
| | | 33.33 | 66.67 | 0.00 | |
| | | 11.36 | 5.65 | 0.00 | |
| | Total | 44 | 177 | 9 | 230 |
| | | 19.13 | 76.96 | 3.91 | 100.00 |

Degrees of Freedom 6
 Chi Square Value 9.397
 Probability 0.152 (No significance.)

The Paraglide's 36 Content Category III paragraphs were spread across the three directional categories with zero negative, 13 neutral (36.11 percent), and 23 positive (63.89 percent). The Observer-Times' 35 Category III paragraphs were zero negative, 26 neutral (74.29 percent), and 9 positive (25.71 percent). The News &

Observer's 2 Content Category III paragraphs were 1 neutral (50.00 percent) and 1 positive (50.00).

A three-by-two chi square test comparing newspaper by directional category for paragraphs under Content Category III showed significance at $p < .001$ with a chi square value of 10.460. (See Table 4.)

Comparing content category by directional category and newspaper by direction within content category for paragraphs provided information to answer research questions one and two. Research question three was addressed by comparing newspaper by content category using only positive frequencies.

A four-by-three chi square test comparing newspaper by content category using only positive frequencies for paragraphs yielded significance at $p < .01$ with a chi square value of 17.035. (See Table 5.)

Table 4

Paragraphs-
Comparison of Newspaper by Direction Under the
Envir./Wildlife Category

Category III- Military Environmental/Wildlife

| | Newspaper | Negative | Neutral | Positive | Total |
|-----------|-----------------|----------|---------|----------|--------|
| Frequency | | 0 | 13 | 23 | 36 |
| Total % | Paraglide | 0.00 | 17.81 | 31.51 | 49.32 |
| Row % | | 0.00 | 36.11 | 63.89 | |
| Column % | | 0.00 | 32.50 | 69.70 | |
| | | 0 | 26 | 9 | 35 |
| | Observer-Times | 0.00 | 35.62 | 12.33 | 47.95 |
| | | 0.00 | 74.29 | 25.71 | |
| | | 0.00 | 65.00 | 27.27 | |
| | | 0 | 1 | 1 | 2 |
| | News & Observer | 0.00 | 1.37 | 1.37 | 2.74 |
| | | 0.00 | 50.00 | 50.00 | |
| | | 0.00 | 2.50 | 3.03 | |
| | | 0 | 0 | 0 | 0 |
| | Herald | 0.00 | 0.00 | 0.00 | 0.00 |
| | | 0.00 | 0.00 | 0.00 | |
| | | 0.00 | 0.00 | 0.00 | |
| | Total | 0 | 40 | 33 | 73 |
| | | 0.00 | 54.79 | 45.21 | 100.00 |

Degrees of Freedom 2
Chi Square Value 10.460
Probability $p < .001$

Note: Chi Square for this table was based on 3 x 2. Frequencies of 0 were not factored in the calculations.

Table 5

Paragraphs-
Comparison of Newspaper by Content Category Using Positive Direction

Positive Frequency

| | Newspaper | Army/Bragg | RCW | Envir./Wild. | Total |
|-----------|-----------------|------------|-------|--------------|--------|
| Frequency | | 72 | 3 | 23 | 98 |
| Total % | Paraglide | 28.24 | 1.18 | 9.02 | 38.43 |
| Row % | | 73.47 | 3.06 | 23.47 | |
| Column % | | 33.80 | 33.33 | 69.70 | |
| | | 120 | 6 | 9 | 135 |
| | Observer-Times | 47.06 | 2.35 | 3.53 | 52.94 |
| | | 88.89 | 4.44 | 6.67 | |
| | | 56.34 | 66.67 | 27.27 | |
| | | 15 | 0 | 1 | 16 |
| | News & Observer | 5.88 | 0.00 | 0.39 | 6.27 |
| | | 93.75 | 0.00 | 6.25 | |
| | | 7.04 | 0.00 | 3.03 | |
| | | 6 | 0 | 0 | 6 |
| | Herald | 2.35 | 0.00 | 0.00 | 2.35 |
| | | 100.00 | 0.00 | 0.00 | |
| | | 2.82 | 0.00 | 0.00 | |
| | Total | 213 | 9 | 33 | 255 |
| | | 83.53 | 3.53 | 12.94 | 100.00 |

Degrees of Freedom 6
Chi Square Value 17.035
Probability $p < .01$

Headlines

Headlines were analyzed in the same manner as paragraphs. The 62 headlines for statistical analysis were categorized as follows: Content Category I (Army/Ft. Bragg)- 48 total headlines (77.42 percent); Content Category II (RCW)- 13 total headlines (20.97 percent); and Content Category III (Military Environmental/Wildlife)- 1 headline (1.61 percent). Total negative headlines was 18 (29.03 percent), total neutral was 23 (37.10 percent), and total positive was 21 (33.87 percent).

The 48 headlines in Category I included 14 negative (29.17 percent), 16 neutral (33.33 percent), and 18 positive (37.50 percent). The 13 headlines in Category II included 4 negative (30.77 percent), 7 neutral (53.85 percent), and 2 positive (15.38 percent). The one headline in Category III was positive.

A three-by-three chi square test was conducted comparing content category by directional category for headlines. The results yielded no significance with a chi square value of 4.631. (See Table 6.)

After the initial comparison of headlines by content categories and directional categories, the four newspapers were compared by direction within the three content categories to determine how each newspaper directionally treated each subject with headlines.

There were 48 headlines placed in Content Category I as stated above. The Paraglide had 13 headlines (27.08 percent of the total) categorized in Content Category I, 26 (54.17 percent) were the Observer-Times, 7 (14.58 percent) were the News & Observer's, and 2 headlines (4.17 percent) were the Herald's.

Table 6

Headlines-
Comparison of Content Category by Directional Category

| Content Category | Directional Category | | | Total |
|--|----------------------|---------|----------|--------|
| | Negative | Neutral | Positive | |
| Cat I-Army/ Ft. Bragg | 14 | 16 | 18 | 48 |
| | 22.58 | 25.81 | 29.03 | 77.42 |
| | 29.17 | 33.33 | 37.50 | |
| | 77.78 | 69.57 | 85.71 | |
| Cat II-RCW | 4 | 7 | 2 | 13 |
| | 6.45 | 11.29 | 3.23 | 20.97 |
| | 30.77 | 53.85 | 15.38 | |
| | 22.22 | 30.43 | 9.52 | |
| Cat III-Military Environmental/ Wildlife | 0 | 0 | 1 | 1 |
| | 0.00 | 0.00 | 1.61 | 1.61 |
| | 0.00 | 0.00 | 100.00 | |
| | 0.00 | 0.00 | 4.76 | |
| Total | 18 | 23 | 21 | 62 |
| | 29.03 | 37.10 | 33.87 | 100.00 |

Frequency
Total %
Row %
Column %

Degrees of Freedom 4
Chi Square Value 4.631
Probability 0.327 (No significance)

The Paraglide's 13 Content Category I headlines were spread across the three directional categories with zero negative, 5 neutral (38.46 percent), and 8 positive (61.54 percent). The Observer-Times' 26 Category I headlines were 7 negative (26.92 percent), 11 neutral (42.31 percent), and 8 positive (30.77 percent). The News & Observer's 7 Content Category I headlines were 5 negative (71.43 percent), zero neutral, and 2 positive (28.57 percent). The Herald's 2 Category I headlines were both negative.

A four-by-three chi square test comparing newspaper by directional category for headlines under Content Category I revealed significance at $p < .01$ with a chi square value of 18.510. (See Table 7.)

When the four newspapers' headlines were compared by directional category under Content Category II, the 13 headlines were distributed across the newspapers with the Paraglide having 2 headlines (15.38 percent of the total), 9 headlines (69.23 percent) were the Observer-Times', 2 headlines (15.38 percent) were the News & Observer's, and the Herald had zero Content Category II headlines.

The Paraglide's 2 Content Category II headlines were 1 neutral (50.00 percent), and 1 positive (50.00 percent). The Observer-Times' 9 Category II paragraphs were 3 negative (33.33 percent), 5 neutral (55.56 percent), and 1 positive (11.11 percent). The News & Observer's 2 Content Category II paragraphs were 1 negative (50.00 percent), and 1 neutral (50.00 percent).

A three-by-three chi square test comparing newspaper by directional category for headlines under Content Category II showed no significance with a chi square value of 2.863. (See Table 8.)

Table 7

Headlines-
Comparison of Newspaper by Direction Under the
Army/Ft. Bragg Category

| | | Category I- Army/Ft. Bragg | | | Total |
|---|-----------|----------------------------|---------|----------|--------|
| Newspaper | | Negative | Neutral | Positive | |
| Frequency Total % Row % Column % | Paraglide | 0 | 5 | 8 | 13 |
| | | 0.00 | 10.42 | 16.67 | 27.08 |
| | | 0.00 | 38.46 | 61.54 | |
| | | 0.00 | 31.25 | 44.44 | |
| Observer-Times | 7 | 11 | 8 | 26 | |
| | 14.58 | 22.92 | 16.67 | 54.17 | |
| | 26.92 | 42.31 | 30.77 | | |
| | 50.00 | 68.75 | 44.44 | | |
| News & Observer | 5 | 0 | 2 | 7 | |
| | 10.42 | 0.00 | 4.17 | 14.58 | |
| | 71.43 | 0.00 | 28.57 | | |
| | 35.71 | 0.00 | 11.11 | | |
| Herald | 2 | 0 | 0 | 2 | |
| | 4.17 | 0.00 | 0.00 | 4.17 | |
| | 100.00 | 0.00 | 0.00 | | |
| | 14.29 | 0.00 | 0.00 | | |
| Total | | 14 | 16 | 18 | 48 |
| | | 29.17 | 33.33 | 37.50 | 100.00 |

Degrees of Freedom 6
Chi Square Value 18.510
Probability p < .01

Table 8

Headlines-

Comparison of Newspaper by Direction Under the RCW Category

| | | Category II- RCW | | | |
|-----------|-----------------|------------------|---------|----------|--------|
| Newspaper | | Negative | Neutral | Positive | Total |
| Frequency | Paraglide | 0 | 1 | 1 | 2 |
| Total % | | 0.00 | 7.69 | 7.69 | 15.38 |
| Row % | | 0.00 | 50.00 | 50.00 | |
| Column % | | 0.00 | 14.29 | 50.00 | |
| | Observer-Times | 3 | 5 | 1 | 9 |
| | | 23.08 | 38.46 | 7.69 | 69.23 |
| | | 33.33 | 55.56 | 11.11 | |
| | | 75.00 | 71.43 | 50.00 | |
| | News & Observer | 1 | 1 | 0 | 2 |
| | | 7.69 | 7.69 | 0.00 | 15.38 |
| | | 50.00 | 50.00 | 0.00 | |
| | | 25.00 | 14.29 | 0.00 | |
| | Herald | 0 | 0 | 0 | 0 |
| | | 0.00 | 0.00 | 0.00 | 0.00 |
| | | 0.00 | 0.00 | 0.00 | |
| | | 0.00 | 0.00 | 0.00 | |
| | Total | 4 | 7 | 2 | 13 |
| | | 30.77 | 53.85 | 15.38 | 100.00 |

Degrees of Freedom 4
 Chi Square Value 2.863
 Probability 0.581 (No significance)

Note: Chi Square for this table was based on 3 x 3. Frequencies of 0 were not factored in the calculations.

Analysis of newspaper by directional category for headlines under Content Category III could not be conducted. Only one headline was placed in this category under the positive direction.

Comparing content category by directional category and newspaper by direction within content category for headlines provided additional information to answer research questions one and two (along with the same comparisons for paragraphs). Research question three was further addressed by comparing the newspapers' headlines by content category using only positive frequencies.

A three-by-three chi square test comparing newspaper by content category using only positive frequencies for headlines showed no significance with a chi square value of 1.413. (See Table 9.)

Table 9

Headlines-
Comparison of Newspaper by Content Category Using Positive Direction

Positive Frequency

| | Newspaper | Army/Bragg | RCW | Envir./Wild. | Total |
|-----------|-----------------|------------|-------|--------------|--------|
| Frequency | | 8 | 1 | 0 | 9 |
| Total % | Paraglide | 38.10 | 4.76 | 0.00 | 42.86 |
| Row % | | 88.89 | 11.11 | 0.00 | |
| Column % | | 44.44 | 50.00 | 0.00 | |
| | Observer-Times | 8 | 1 | 1 | 10 |
| | | 38.10 | 4.76 | 4.76 | 47.62 |
| | | 80.00 | 10.00 | 10.00 | |
| | | 44.44 | 50.00 | 100.00 | |
| | News & Observer | 2 | 0 | 0 | 2 |
| | | 9.52 | 0.00 | 0.00 | 9.52 |
| | | 100.00 | 0.00 | 0.00 | |
| | | 11.11 | 0.00 | 0.00 | |
| | Herald | 0 | 0 | 0 | 0 |
| | | 0.00 | 0.00 | 0.00 | 0.00 |
| | | 0.00 | 0.00 | 0.00 | |
| | | 0.00 | 0.00 | 0.00 | |
| | Total | 18 | 2 | 1 | 21 |
| | | 85.71 | 9.52 | 4.76 | 100.00 |

Degrees of Freedom 4
 Chi Square Value 1.413 (No significance)
 Probability 0.842

Note: Chi Square for this table was based on 3 x 3. Frequencies of 0 were not factored in the calculations.

CHAPTER V

DISCUSSION

Conclusions

The principal concern for determining conclusions from the data derived in the statistical analysis is answering the first three quantitative research questions. The fourth research question is qualitative and can only be addressed after consideration of the quantitative data. Each question will be addressed individually.

Research Question One

In selected local newspapers, what was the relative amount of coverage of certain aspects or elements of the issue involving Fort Bragg and the endangered bird species, the Red-Cockaded Woodpecker?

Conducting data base, microfilm, and manual searches of bound copies of the five selected newspapers yielded 63 stories, 62 headlines (one story was a "brief" with no headline), consisting of 1,062 paragraphs. The coding process eliminated 168 paragraphs, leaving 894 for analysis. Without comparison to another topic covered by these newspapers making a value judgment about the total amount of coverage is difficult, but the amount of coverage each newspaper had over the five-year period from January 1, 1988, to April 30, 1993, can be compared.

The Observer-Times had the largest amount of coverage with 37 stories (58.73 percent), the Paraglide was second with 15 stories (23.81 percent), the News & Observer was third with 9 stories

(14.29 percent), and the Herald was fourth with 2 stories (3.17 percent). (See Figure 1.)

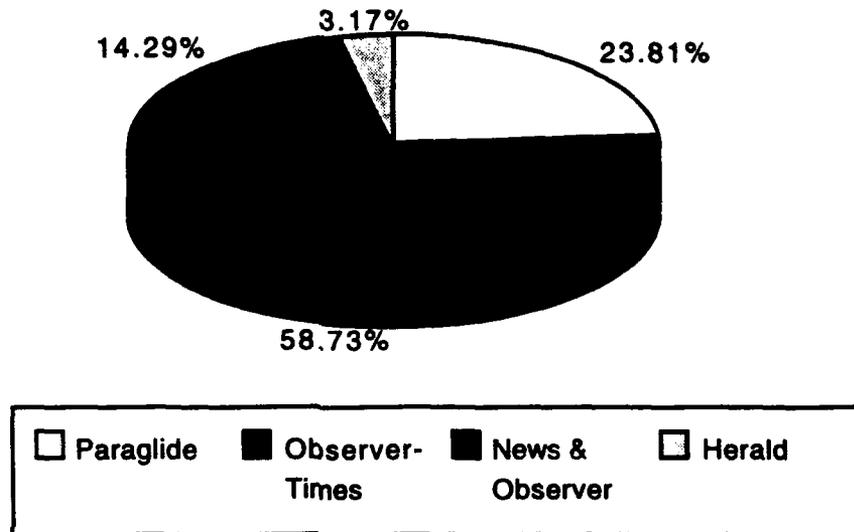


Figure 1

Number of Newspaper Stories from
January 1, 1988 to April 30, 1993

The amount of coverage was somewhat proportional to newspaper circulation and proximity. The Observer-Times and the Herald, along with the Paraglide, of course, are the newspapers located closest to Fort Bragg. Fayetteville is adjacent to Fort Bragg and Sanford is approximately 20 miles away.

The Observer-Times has the largest circulation of these closest newspapers, with the Paraglide and the Herald distant second and third largest circulations respectively. (See Appendix A.)

There was less coverage of the RCW/Fort Bragg issue in the News & Observer, but this may be understandable given the greater distance (approximately 50 miles) between Raleigh and Fort Bragg. The newsplay given to any Fort Bragg topic in the Raleigh newspaper could also be a factor.

It is also important to put total coverage into perspective when coverage by large daily newspapers and smaller weekly newspapers is being compared. The Observer-Times is a daily newspaper that naturally has more opportunity to cover any newsworthy issue in the local area.

The specific elements covered by each newspaper in the study were the three content categories. The Observer-Times led in each category with 356 paragraphs in the Army/Ft. Bragg category, 139 paragraphs in the RCW category, and 35 paragraphs in the Military Environmental/Wildlife category. The Paraglide was second with 129 paragraphs in the Army/Ft. Bragg category, 55 in the RCW category, and 36 in the Military Environmental/Wildlife category. The News & Observer was third with 87 paragraphs in the Army/Ft. Bragg category, 21 in the RCW category, and 2 in the Military/Environmental category. The Herald had 19 paragraphs in the Army/Ft. Bragg category, 15 in the RCW category, and zero in the Military Environmental/Wildlife category. (See Figure 2.)

Again, the number of paragraphs in each category can be attributed to total coverage by each newspaper. The more significant information lies in the directional categorization of both paragraphs and headlines.

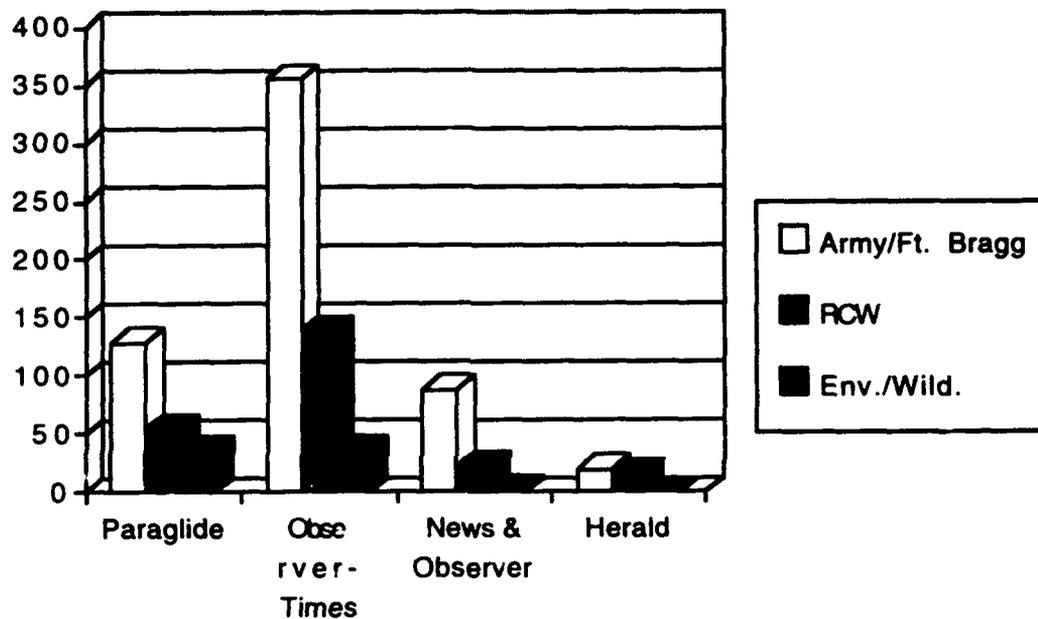


Figure 2

Paragraph Coverage by Newspaper and Content Category

Research Question Two

Was there a discernible tone to the coverage? What percentage of individual references in articles and headlines were positive, negative, or neutral in the way in which they reflected upon certain aspects or elements of Fort Bragg's actions relative to the protection of the endangered woodpecker species?

The most important information for the Fort Bragg Public Affairs Office may be the "direction" in which the content categories were covered by the four newspapers.

While it is not possible to pinpoint the exact location or cause of the significance when using chi square statistical analysis, one can note significant differences in frequencies and percentages to find likely reasons for chi square results.

Content Category I. Table 2 on page 28 shows significance at $p < .0001$ when comparing newspaper by direction under the Army/Ft. Bragg category. The data that appears to have the most impact on significance in this comparison is the amount of positive coverage in both the Paraglide and the Observer-Times. More than 80 percent of these two newspapers' Army/Ft. Bragg paragraphs were neutral or positive, which is in stark contrast with the News & Observer's 51.72 percent negative Army/Ft. Bragg paragraphs.

Headlines in the Army/Ft. Bragg category were coded much the same as the paragraphs. Table 7 on page 37 shows more than 90 percent of the Paraglide's headlines in this category were neutral to positive, while more than 70 percent of the Observer-Times' headlines were neutral to positive. The Paraglide had no negative headlines as opposed to the Observer-Times' 26.92 percent and the News & Observer's 71.43 percent.

Content Category II. Table 1 on page 26 also shows that paragraphs in the RCW category were coded neutral 76.96 percent of the time, as compared to the Army/Ft. Bragg category, which was more evenly distributed across the directional categories with

19.46 percent of the paragraphs in the category being coded negative, 44.50 percent neutral, and 36.04 percent positive.

The large number of neutral RCW paragraphs may be attributed to the fact that the bird is considered a victim of the Army's practices, while being enough of a distraction to not gain substantial positive coverage. Table 8 on page 38 shows that headlines under the RCW category were also largely neutral at 53.85 percent.

Content Category III. Table 1 on page 26 shows a chi square significance at $p < .0001$ when comparing content category by directional category for paragraphs. The most outstanding difference in the table appears in the Negative-Content Category III cell in which there were no negative paragraphs about the military environmental/wildlife offices and personnel. It may be people in this category were seen as responsibly performing the duties of their offices. It also could be argued that the Army and Fort Bragg were being held responsible for negative situations regardless of the specific office or group immediately responsible.

Table 4 on page 32 compares newspapers by direction under Content Category III and supports the notion that military environmental/wildlife offices are covered neutrally to positive. The Paraglide's paragraphs in this category were 63.89 percent positive as opposed to the Observer-Times' 74.29 percent neutral. This category represents the Army and Fort Bragg's direct contacts with the Red-Cockaded Woodpecker. It appears the Paraglide may be employing some "public relations advocacy" for Fort Bragg's environmental and wildlife efforts.

Headlines treated military environmental/wildlife offices and personnel in the same manner. There were no negative headlines in this category as seen in Table 6 on page 35, although this comparison of headlines by content category and directional category was not found significant.

Summary. The differences between the more rural or smaller newspapers, the Paraglide and the Observer-Times, and the larger, urban News & Observer support Corbett's findings in her study of rural and urban newspaper coverage of wildlife. Corbett found that urban newspapers are much more likely than rural papers to report stories of high conflict (933). The high concentration of negative paragraphs in the Army/Ft. Bragg category (71.43 percent) may well show the News & Observer's tendency to depict conflict in wildlife stories as negative. (See Figure 3.)

Corbett also observes that community structure affects the reporting of conflict. In a smaller town, media are more likely to avoid reporting conflict and instead concentrate on social news and agreement (931). This observation could be applied to the Fayetteville community. Fayetteville has deep economic ties with Fort Bragg while Fort Bragg relies heavily on Fayetteville to welcome its thousands of soldiers and families into the community. This "friendly" relationship and sense of commitment could have some influence on Fayetteville's media coverage of Fort Bragg issues.

There was a "discernible tone" to the coverage of the content categories.

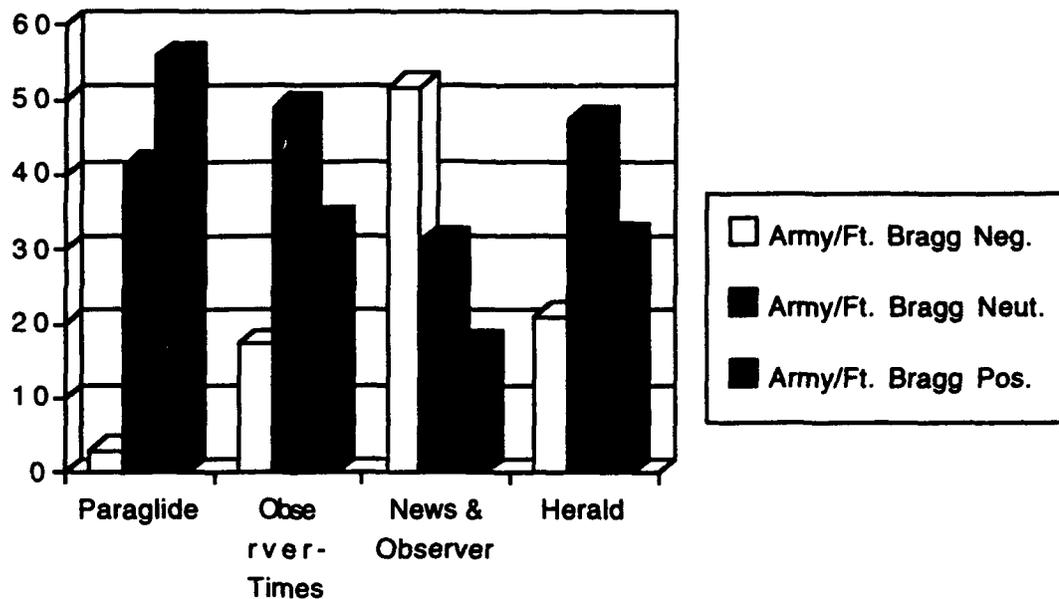


Figure 3.

Comparison of Newspaper Coverage of the Army/Ft. Bragg
(expressed in percentage)

Research Question Three

How did the amount and tone of coverage differ between Fort Bragg's command information newspaper, the Paraglide, and the civilian newspapers? Was one paper significantly more positive than the others?

Table 5 on page 33 and Table 9 on page 40 compared newspapers by content category using positive direction for paragraphs and headlines respectively. Headlines showed no significant

relationship between newspaper, category, and positive categorization; however, paragraphs yielded significance at $p < .01$.

The outstanding data in Table 5 is the percentage of the total positive paragraphs the Paraglide and the Observer-Times claim over the News & Observer and the Herald (91.37 percent and 8.62 percent respectively). Because of the unequal number of stories and subsequently, paragraphs, between the newspapers, it is necessary to use percentages to explain how Table 5 shows significance.

Using the frequencies from Table 5 and Tables 2 through 4, dividing the total number of positive paragraphs for each newspaper by each newspaper's overall number of paragraphs reveals the percentage of positive paragraphs for each newspaper.

The Paraglide had 98 positive paragraphs and 220 total paragraphs, which yields a positive percentage of 44.55. The Observer-Times had 135 positive paragraphs and 530 total paragraphs, which yields a positive percentage of 25.47. The News & Observer had 16 positive paragraphs and 110 total paragraphs, which yields a positive percentage of 14.55. Finally, the Herald had 6 positive paragraphs and 34 total paragraphs, which yields a positive percentage of 17.65. Figure 4 shows the proportions between directional categories of paragraphs for each of the newspapers.

The Paraglide appears to write more positively than the other newspapers. This is not surprising given the "public relations" angle of a military command information newspaper. This is not to say truth is shrouded in blind advocacy, but neutrality and positivity overshadow negativity in the Paraglide, which is in keeping with the

mandated communications messages in the Army's Public Affairs Campaign Plan for Environmental Stewardship.

The mandated messages in the environmental stewardship campaign plan include communicating the Army's desire to be a national leader in environmental stewardship; the Army cares about the global environment; the Army is demonstrating its commitment to protection and stewardship of the environment; and conservation is compatible with good training, good maintenance, and a good quality of life; among others (5-7).

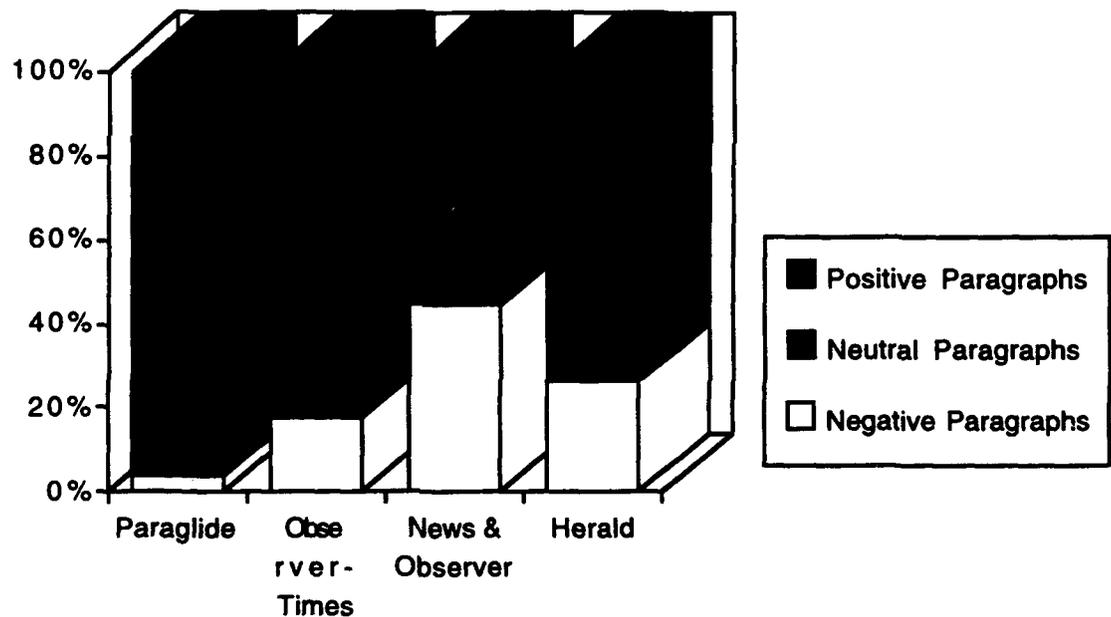


Figure 4.

Comparison of Newspaper Direction

Research Question Four

What actions has the Fort Bragg public affairs office taken? Can inferences be made about public affairs actions and local newspaper coverage?

The first evidence of Fort Bragg public affairs involvement in the Red-Cockaded Woodpecker dilemma has been already discussed in some detail-- coverage by the command information newspaper, the Paraglide. Dates of Paraglide articles and editorials are listed in Appendix B. Evidence of public affairs action and involvement beyond articles and editorials in the Paraglide were difficult to find during the conduct of research for the study. The Fort Bragg Public Affairs Office had obvious changes in priority during aforementioned crises in which XVIII Airborne Corps soldiers deployed in support of national security objectives.

The remaining evidence was found through historical research in media releases, staff notes, and correspondence files from the Fort Bragg Public Affairs Office. To put this evidence into perspective, it is necessary to highlight the milestones of the dilemma.

As previously outlined, the Red-Cockaded Woodpecker dilemma began for Fort Bragg May 12, 1988 when the U.S. Fish and Wildlife Service notified Fort Bragg officials of the possible negative effects military actions and operations were having on the species. This notification marks the first milestone. There were no media releases or public affairs staff notes present in the 1988 files, nor were there any Paraglide stories published about the issue in 1988 or in 1989.

The second milestone in the dilemma was the Environmental Defense Fund's (EDF) "notification of intent to sue" given to the Secretary of the Army on February 2, 1990, and subsequently to the commander of XVIII Airborne Corps and Fort Bragg June 13, 1990, (The EDF is a national environmental "watchdog" organization.) (EDF letter 1).

On July 18, 1990, the Public Affairs Office prepared a media release outlining a meeting between EDF, U.S. Fish and Wildlife officials, military officials ranging from Fort Bragg to the Office of the Secretary of Defense, and officials from the North Carolina Chapter of the National Wildlife Federation. This was the only media release or documented evidence of public affairs actions found for 1990 with the exception of three Paraglide stories. (See Appendix B.)

The third milestone in the dilemma was Fort Bragg's decision to close the weapons firing range (Range 63) October 30, 1991, because of the woodpecker. The only documented evidence available in the public affairs files for 1991 were staff notes from the weeks November 6-20 in which the Red-Cockaded Woodpecker and the Range 63 closure were two of six topics the media relations section handled (Staff Notes 1). There were three Paraglide stories, one of which covered the range closure. (See Appendix B.)

The fourth milestone was the reopening of Range 63 August 10, 1992. The Fort Bragg Public Affairs Office prepared a media release August 7 relating the details of the reopening.

The fifth and final milestone in Fort Bragg's Red-Cockaded Woodpecker efforts is the regional Red-Cockaded Woodpecker conference, which occurred September 28, 1992. A media release was prepared September 15, 1992 in reference to the conference Fort Bragg was organizing. The public affairs office was involved in the planning process for the conference as evidenced by an August 13, 1992, memorandum from the Fort Bragg chief of public affairs to the Fort Bragg commander.

The Paraglide published nine stories about the Red-Cockaded Woodpecker issue in 1992, of which one was about the range reopening and three were about the conference.

There was no documentation of any 1993 actions in the files.

Total documented Fort Bragg public affairs actions in the woodpecker issue from January 1, 1988, to April 30, 1993, is 15 Paraglide stories, three media releases, and one document outlining the actions of the media relations section of the Public Affairs Office over a two-week period.

This historical research does not purport being comprehensive. Numerous undocumented media telephone queries were handled over the five years in question. It does appear, however, that the major milestones were generally covered through media releases and Paraglide stories.

If any inferences can be made about Fort Bragg public affairs actions and local newspaper coverage, it could be said the actions gained neutral to positive coverage as evidenced by the data in Table 1 on page 26. Table 1 shows 53.69 percent of all paragraphs coded

were neutral while 28.52 percent were positive. Table 6 on page 35 shows that 37.10 percent of all headlines coded were neutral while 33.87 percent were positive.

Fort Bragg's environmental program for public affairs, outlined in the August 13, 1992, memorandum from the public affairs chief to the Fort Bragg commander, was not formalized until the date of the memorandum. Fort Bragg may have become more "proactive" if a public affairs plan had been established earlier.

In defense of the tardiness of Fort Bragg's public affairs environmental policy, it should be noted that the Army's Public Affairs Campaign for Environmental Stewardship was not written until October 6, 1992. Also the Army's Environmental Strategy into the 21st Century was not published until 1992.

Fort Bragg appears to have been slightly ahead of the game.

Suggestions For Future Study

To strengthen the portion of this content analysis that attempts to determine media perception, one could conduct surveys in conjunction with the coding of articles. The respondent population/sample could be the editors and reporters of the newspapers selected.

The survey may provide insights into specifics of newsworthiness and treatment that content analysis could not. Also, surveys could provide the opportunity to ask qualitative questions of those persons who manage the news.

Another improvement to this study would be to include all television and radio news, along with newspapers. Researchers could then obtain a more complete picture of "media perception."

Future research could be conducted around other military installations to provide insights to public affairs effectiveness with environmental/endangered species efforts. Using this study as a model, a public affairs officer could establish "concurrent" research while dealing with environmental issues. The concept of issues management could then be fully employed using formal research as the basis for management.

Appendix A

Newspaper Information

Paraglide

Address:

XVIII Airborne Corps Public Affairs

ATTN: AFZA-PAO, Paraglide

Fort Bragg, North Carolina

28307-5000

(919) 396-6817

Owner: U.S. Army

Publisher: U.S. Army

Published: Weekly

Circulation: 25,000/week

Sanford Herald

Address:

Herald Publishing Co.

208 St. Clair Court

P.O. Box 100

Sanford, North Carolina

27330

(919) 776-0534

Owner: Independently owned

Publisher: Mr. W.E. Horner

(owner)

Published: Daily (No Sunday)

Circulation: 14,600/week

Fayetteville Observer-Times

Address:

Fayetteville Publishing Co.

458 Whitfield Street

Fayetteville, North Carolina 28306

(919) 323-4848

Owner: Independently owned

Publisher: Mr. Ramon Yarborough

Published: Daily

Circulation:

Mon-Sat: 71,754

Sun: 82,753

Spring Lake News

Address:

119 Skyland Plaza

Spring Lake, North Carolina

28390

(919) 436-2051

Owner: Independently owned

Publisher: Dickson Press

Published: Weekly

Circulation: 8,500/week

Raleigh News & Observer

Address:

News & Observer Publishing Co.

215 South McDowell Street

Raleigh, North Carolina 27601

(919) 829-4500

Owner: Independently owned

Publisher: Mr. Frank Daniels (President & Publisher)

Published: Daily

Circulation: Mon-Sat: 145,692

Sun: 188,843

Appendix B

Stories Coded

Paraglide

| | <u>Headline</u> | <u>Date</u> | <u>Page</u> |
|-----|---|--------------|-------------|
| 1. | Bragg protects endangered bird | Apr 5, 1990 | 1A |
| 2. | DoD's defense plan includes environment | Jun 28, 1990 | 5B |
| 3. | Soldiers doing part to protect woodpecker | Jun 28, 1990 | 7A |
| 4. | Airborne Leader Course gets new obstacle course | Jul 11, 1991 | 2B |
| 5. | Man can coexist with environment | Jul 27, 1991 | 6B |
| 6. | Multi-purpose range closes | Nov 21, 1991 | 4A |
| 7. | Watch out for different colored bands at Bragg | Jan 9, 1992 | 2A |
| 8. | Army protects endangered species | Feb 27, 1992 | 9A |
| 9. | Wildlife, soldiers can share | Apr 2, 1992 | 1A |
| 10. | Soldiers, wildlife can live together | Jul 11, 1992 | 1A |
| 11. | Post maintains training, environmental balance | Aug 13, 1992 | 1A |
| 12. | Range reopening sample of commitment to environmentally-conscious training | Sep 3, 1992 | 9A |
| 13. | Environmental conference | Sep 24, 1992 | 1A |
| 14. | Environmental conference ends | Oct 1, 1992 | 1A |
| 15. | Military, civilian partnership key to preserving woodpecker habitat | Oct 8, 1992 | 1A |

Fayetteville Observer-Times

| | <u>Headline</u> | <u>Date</u> | <u>Page</u> |
|----|--|--------------|-------------|
| 1. | Fort Bragg Endangering Woodpecker | Dec 8, 1989 | 1A |
| 2. | Bragg Accommodating A Troublesome Tenant | Dec 14, 1989 | 1D |
| 3. | Environmental Group Threatens to Sue Army | Feb 10, 1990 | 4A |
| 4. | Bragg Told Its Policies Threaten Bird, Plants | Feb 10, 1990 | 1A |
| 5. | Report Suggests Wildlife Program | Feb 10, 1990 | 1A |

(©-no page number available through manual/database search)

| | | | |
|-----|---|--------------|-----|
| 6. | Woodpecker Mission | Feb 13, 1990 | 16A |
| 7. | Tiny Rat-A-Tat Outsounds Armor | Mar 15, 1990 | 1A |
| 8. | Bragg Studies Ways To Protect Bird | Apr 7, 1990 | 1A |
| 9. | Wildlife Probe 'Pecks' Away At Fort Bragg | Jun 28, 1990 | 1A |
| 10. | Charges Over Birds Debated | Jun 29, 1990 | 1B |
| 11. | Land-Purchase Talks Under Way As Fort Bragg Seeks To Expand | Jul 7, 1990 | 1A |
| 12. | A Cool Idea | Jul 19, 1990 | 12A |
| 13. | Shape Up Or Get Sued, Environmentalists Tell Fort Bragg | Jul 20, 1990 | 1B |
| 14. | Bragg Gets Warning On Wildlife | Jul 20, 1990 | 1B |
| 15. | He Knows The Secrets Of An Endangered Bird | Oct 3, 1991 | 1A |
| 16. | Range Closed To Protect Woodpecker | Nov 6, 1991 | 1A |
| 17. | Bragg To Stay Stable, Chief Of Staff Says | Dec 4, 1991 | 1B |
| 18. | General: Force To Stay Strong | Jan 29, 1992 | 1A |
| 19. | Secretary Of Army To Visit | Apr 2, 1992 | 1B |
| 20. | Secretary Of The Army Pays Visit To Fort Bragg | Apr 3, 1992 | @ |
| 21. | That Red-Head | May 17, 1992 | @ |
| 22. | General: Civilians Should Aid Bird | Jun 25, 1992 | 1A |
| 23. | Training Range To Reopen | Aug 8, 1992 | 1A |
| 24. | 'Fire!'- Once Closed For Birds, Range 63 Roars Again | Aug 11, 1992 | 1B |
| 25. | Rare Woodpecker Doesn't Look Like One | Sep 27, 1992 | 2A |
| 26. | Cooperation Urged To Help Woodpecker | Sep 27, 1992 | 1B |
| 27. | Bragg Calls For Reinforcements To Aid Endangered Woodpecker | Sep 27, 1992 | 1A |
| 28. | (no headline- article was a brief in the "Local-State" column) | Sep 27, 1992 | 2A |
| 29. | Official: Military Training Limited | Sep 30, 1992 | 1B |
| 30. | Bragg Given OK To Buy Land | Sep 30, 1992 | 1B |
| 31. | Officials Stress Woodpecker Protection Incentives | Oct 1, 1992 | 1B |
| 32. | Longleaf Pine Challenge | Oct 5, 1992 | 10A |
| 33. | Study Indicates Bird Conflict Was Avoidable | Dec 31, 1992 | 1D |
| 34. | Saving The Woodpecker | Dec 31, 1992 | 10A |
| 35. | Botanists Survey Bragg To Safeguard Rare Plants | Jan 31, 1993 | 1G |

- | | | | |
|-----|--|--------------|----|
| 36. | Bragg Biologist Says Woodpeckers Can Be Preserved | Mar 11, 1993 | 4B |
| 37. | Bragg, PWC Environment Pact Signed | May 6, 1993 | 1B |

Raleigh News & Observer

- | | <u>Headline</u> | <u>Date</u> | <u>Page</u> |
|----|---|--------------|-------------|
| 1. | Wildlife report calls Fort Bragg flighty in care of woodpecker | Dec 12, 1989 | 3B |
| 2. | Army criticized on woodpecker's care | Dec 12, 1989 | @ |
| 3. | Guard members watch for endangered birds | Feb 17, 1990 | @ |
| 4. | Military straining wildlife habitats | Jun 28, 1990 | @ |
| 5. | On manuevers against nature? | Jul 7, 1990 | 10A |
| 6. | Woodpecker holding off army assault | Nov 7, 1991 | 6B |
| 7. | General urges citizens to relieve bird problem | Jun 26, 1992 | 5B |
| 8. | Federal official seeks help for woodpeckers | Sep 30, 1992 | 5B |
| 9. | Environmental issues cut Bragg training area | Oct 1, 1992 | 5B |

Sanford Herald

- | | <u>Headline</u> | <u>Date</u> | <u>Page</u> |
|----|--|--------------|-------------|
| 1. | Report: Army failed to properly manage habitat for endangered woodpeckers | Dec 12, 1989 | 5B |
| 2. | Birds hold off Airborne assault | Nov 6, 1991 | 5A |

Appendix C
Coding Sheet

| Coder ID: | Story No.: | Content Categories-Paragraphs | Directional Categories-Paragraphs | | | Directional Categories-Headline | | |
|------------|------------|---|-----------------------------------|---------|----------|---|---------|----------|
| | | | Negative | Neutral | Positive | Negative | Neutral | Positive |
| 1 | | Army/Fort Bragg: References to Army and Fort Bragg military officials such as commanders or directors of military offices. Military rank and Department of Defense titles are indicators of these military officials. (Does not include military environmentalists/biologists.) Also included are references to the Army/Fort Bragg policies, plans, techniques, and programs of land management, military training and the use of military training facilities, and compliance with environmental law. | | | | | | |
| 2 | | Red-cockaded Woodpecker (RCW): References to those RCWs living within the confines of Fort Bragg thereby creating the endangered species protection issue. | | | | | | |
| 3 | | Fort Bragg environmental/wildlife offices and personnel: References to the personnel or the offices of the Fort Bragg Department of Engineering and Housing, Environmental and Natural Resources Division, or the Endangered Species Branch within that division. | | | | | | |
| Remarks: | | | Negative | Neutral | Positive | Headline Negative Neutral Positive (circle one) | | |
| | | | | | | | | |
| Subtotals: | | | | | | | | |
| Totals: | | | | | | | | |

Appendix D

Coder Instructions

In the enclosed packet you will find 20 newspaper articles and 20 coding sheets. Your task is to rate the headline and paragraphs of each article according to the content categories and the directional categories on the coding sheet. Use a separate coding sheet for each article. You are to take the following actions:

1. Fill out the two administrative blocks on the upper left-hand corner of the coding sheet.
2. Read the entire article before coding any paragraph or the headline.
3. Go back and read each paragraph separately. Consider which content category, if any, the paragraph most closely fits.
4. Consider whether the paragraph/headline is neutral.
5. Try to stick with direct statements and do not "read meaning" into the context of the paragraph/headline. If you decide the paragraph/headline is negative or positive, consider whether the information that made you decide is directly stated or if the image you got was inferred from the information.
6. Place the number of the paragraph/headline beside the proper content category and underneath the proper directional category.

Remember to judge the paragraphs/headlines in the context of which they were written. Also keep in mind that many paragraphs may not fit in any content category. Don't worry; the study doesn't hinge on every paragraph. Simply do not rate the paragraph, but

write the numbers of the paragraphs you do not code in the remarks block. This is not to say that any difficulty you have allows you to avoid the paragraph. Some paragraphs may simply contain information not pertinent to this study.

You also may find it difficult to determine the difference between negative, positive and neutral if the paragraph/headline seems balanced. In most cases, the paragraph may be neutral if it is balanced, but consider the language and word use if you are in doubt. Breaking the sentences down to subjects, verbs, and adjectives may help. If you can't decide, it's probably neutral (or you're tired and need a break.)

If you have questions, call me at (xxx) xxx-xxxx.

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